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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,315

12/16/2004

Uwe Falk

2002DE422

6737

26289

7590

01/06/2009

AZ ELECTRONIC MATERIALS USA CORP.
ATTENTION: INDUSTRIAL PROPERTY DEPT.
70 MEISTER AVENUE
SOMERVILLE, NJ 08876

EXAMINER

CHAWLA, JYOTI

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

01/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,315	Applicant(s) FALK ET AL.	
	Examiner JYOTI CHAWLA	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/25/08, 8/7/08, 1/30/08, 5/29/07, 1/22/07, 9/5/06, 6/14/06, and 8/29/05.

DETAILED ACTION

Applicants' submissions of 10/20/2008 has been acknowledged. Claims 1-26 are pending and examined in the application.

Priority

Acknowledgment is made of receipt of certified copy of the 10229047.4 application.

Information Disclosure Statement

Information Disclosure Statement(s) (PTO/SB/08) having mail dates :9/25/08, 8/7/08, 1/30/08, 5/29/07, 1/22/07, 9/5/06, 6/14/06, and 8/29/05 have been considered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

A) Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm et al. (US 4,027,046), hereinafter Bohm, in view of Tanaka et al. (US 5,622,743), hereinafter Tanaka.

References and rejections are incorporated herein and as and as cited in the office action dated June 25, 2008.

B) Claims 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohm (US 4,027,046), in view of the combination of Tanaka (US 5,622,743) and Brewing Science and Practice (pages 556-559).

References and rejections are incorporated herein and as and as cited in the office action dated June 25, 2008.

Response to Arguments

Applicant's arguments filed 10/20/2008 have been fully considered but they are not persuasive.

I) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants' argument that Bohm does not teach the pH as recited, which as discussed in the previous office action dated June 25, 2008 was disclosed by Tanaka. Further, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Bohm teaches a method for fining, clarifying and stabilizing liquid foods comprising adding to the liquid foods colloidal, anionic silica sols having particle diameter of 2-200 millimicron (nm) (Column 1, lines 37-47 and claim 4) which includes applicants recited range of 4-150 nm. Regarding surface area Bohm teaches of silica sol particles of 50-600 m²/g (Column 4, lines 22-28), which falls in applicant's recited range of 20 to 700 m²/g. Also see (Abstract, Column 2, lines 40-45, Column 4, lines 22-28). Regarding the pH of silica sol,

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Bohm teaches that both acidic and alkaline sols were available at the time, however, Bohm does not specify the pH of silica sol used to fine or clarify or stabilize liquid foods. Tanaka teaches of treatment of beer (liquid food) to stabilize beer with aqueous silica suspension having a pH range of 3.5 to 5 (Abstract, column 4, lines 15-25), which includes pH values in applicant's recited range of pH 1-4. Tanaka also teaches that aqueous silica suspension that is mildly acidic is preferred because it falls in a pH region like that of beer and is more effective in removing turbidity precursors without deteriorating the froth-holding property of beer (Column 2, lines 45-55). Thus, aqueous suspensions of silica in acidic range were known to be used to clarify or stabilize beer or liquid foods at the time of the invention (Tanaka). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bohm and use acidic aqueous silica suspension with pH in the range as taught by Tanaka to clarify food liquids, like beer, in order to effectively remove turbidity precursors without deteriorating the froth-holding property of beer, as taught by Tanaka.

Further, applicants' comment that Tanaka's silica gel is xerogel type and the aqueous suspension thereof exhibits a pH of 4 to 6.2 (Remarks, page 9, paragraph 2) clearly states that the aqueous silica dispersion with pH within applicants' recited range was known in the art at the time of the invention.

II) Applicants' argument that Bohm's silica sol is aluminate modified and not the same as recited in the claim (Remarks, page 7, paragraph 3). However, as recited the claims "stabilizing liquid comprising adding to the liquids foods colloidal, anionic silica sols", which is taught by combination of Bohm and Tanaka. Thus the limitation argued that "aluminate-modified" was not recited as such in the rejected claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., aluminate modified silica sol is different from the one claimed) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from

the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Similarly, Applicants' comment that Tanaka's silica gel is xerogel type and the aqueous suspension thereof exhibits a pH of 4 to 6.2 (Remarks, page 9, paragraph 2) and the argument that "that anionic colloidal silica sol has much better properties than xerogel when tested in beer" "Beer with inventive colloidal silica had acceptable cloud after 15 days, beer treated with Xerogel exceeded the acceptable cloud after 12 days" (Remarks, page 9, paragraphs 3 and 5), applicants are reminded that properties, such as "acceptable clouding after 15 days" are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

III) Regarding applicant's argument that Brewing Science and Practice (2004 Publication) not having the date as the applicant's priority goes back to June 28, 2002. Applicants' priority of June 2002 does not overcome the rejection because pages 557 to 559 of Brewing Science and Practice show the dates of the references relied upon to show that addition of silica hydrogel or aqueous sols to the beer in the maturation tank before filtration, the documents cited are (Green et al 2000, Guzman et al 1999, McKeowen and Earl 2000), and as such applicant's argument has not been found convincing.

As further evidence applicants' are referred to an IDS article by K. Raible et al, 1985 Article (IDS 2/18/08), where the summary on page 546 clearly states that the addition of salicylic acid hydrosols to finished beer before filtration to improve its colloidal stability was known at the time. Thus applicants' claim of addition of silica sol to unfiltered beer being novel has not been found convincing.

Applicants' arguments filed 10/20/2008 have been fully considered but have not been found convincing for the reasons discussed above, and the rejections of claims 1-26 have been maintained for reasons of record.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/
Examiner
Art Unit 1794

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794